



CROSS 280

Caution !

Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching the wires!

Keep this device away from rain and moisture!

Make sure it is grounded when using it!

Unplug mains lead before opening the housing!

For your own safety, please read this user manual carefully before you initial start-up.

Every person involved with the installation, operation and maintenance of this device has to

- be qualified
- follow the instructions of this manual

Introduction

Thank you for having chosen CROSS 280 . You will see you acquired a powerful and versatile device. Unpack your item. Before you initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

Safety instructions

This device has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual. Always disconnect from the mains, when the device is not in use or before cleaning it. Keep away children and amateurs from the device! There are no serviceable parts inside the device.

Maintenance and service

operations are only to be carried out by authorized dealers.

Installation

On the rear panel of the item you can find an 3pin XLR-jack (DMX Out) and an 3pin XLR-plug (DMX In), which can be used for connecting several devices. Choose the device which is to control the effects. Connect the DMX OUT-jack with the DMX IN-plug of the next device.

DMX-512 connection / connection between fixtures

Occupation of the XLR-connection:

If you are using controllers with this occupation, you can connect the DMX-output of the controller directly with the DMX-input of the first fixture in the DMX-chain. If you wish to connect DMX-controllers with other XLR-outputs, you need to use adapter-cables.

Building a serial DMX-chain:

Connect the DMX-output of the first fixture in the DMX-chain with the DMX-input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected.

DMX-512 connection with DMX terminator

For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below.

Caution: At the last fixture, the DMX-cable has to be terminated with a terminator. Solder a 120 resistor between Signal (–) and Signal (+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.

Connection with the mains

Connect the device to the mains with the enclosed power supply cable.

Control menu map

Tab	Level 1	Level 2
FEATURES SETTING	Run Mode	STAN/DEFE/SMAL
	Chan Mode	OFF/ON
	X Reverse	OFF/ON
	Y Reverse	540/360
	X Angle	ON/OFF
	XY Fback	ON/OFF
	Signal Clear	ON/OFF
	Full Color	OFF/ON
	Short Cut	OFF/ON
	ESC	
MANUAL		
	LAMP REST	
	TEST RUN	
	SMULATE DMX	
SYSTEM INFO		
	DMX VALUE	
	OTHER INFO	
	ERROR INFO	
DISPLAY SETTING		
	Brightness	7Level/1Level
	LightDelay	On/10Seconds/20Seconds/30Seconds
	Menanack	Off/10Seconds/20Seconds/30Seconds
	Flicker	On/Off
	ESC	
LAMP SETTING		
		

Operation

Projector DMX starting address selection

All fixtures should be given a DMX starting address when using a DMX signal, so that the correct fixture responds to the correct control signals. This digital starting address is the channel number from which the fixture starts to listen to the digital control information sent out from the DMX controller. The allocation of this starting address is achieved by setting the correct number on the display located on the base of the device.

You can set the same starting address for all fixtures or a group of fixtures, or make different address for each fixture individually.

If you set the same address, all the units will start to listen to the same control signal from the same channel number. In other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set a different address, each unit will start to listen to the channel number you have set, based on the quantity of control channels of the unit. That means changing the settings of one channel will affect only the selected fixture.

In the case of this fixture, which is 10/36 channels. When you select the standard channel mode, you should set the starting address of the first unit to 1, the second unit to 11/37($10+1/36+1$), the third unit to 21/47($10+11/10=37$), and so on.

Control Board

The Control Board offers several features: you can simply set the starting address, run the pre-programmed program or make a reset.

The main menu is accessed by pressing the **Mode**-button until the display starts flashing. Browse through the menu by pressing the **Up**-button or **Down**-button. Press the **Enter**-button in order to select the desired menu. You can change the selection by pressing the Up-button or Down-button. Confirm every selection by pressing the **Enter**-button. You can leave every mode by pressing the **Mode**-button. The functions provided are described in the following sections.

OVATION CROSS 280 Channel DMX Table

23 Channel mode	Function	Function Control
CH1	Pan	0-255: Pan 0° -540°
CH2	Pan Fine	
CH3	Tilt	0-255: Tilt 0° -270°
CH4	Tilt Fine	
CH5	Pan/Tilt Speed	
CH6	Macro Function	0-19: No function 20-24: Energy Saving Mode (230w) 25-129: No function 130-139 : Light on 140-149: Pan , Tilt reset 150-159: No function

		160-169: All motor reset 170-199: No function 200-209: Reset 210-229: No function 230-239: Light off 240-255: No function
CH7	Color Wheel	0-8: White 9-17: White+Fluorescent Blue 18-26: Fluorescent Blue+Cooling 27-35: Cooling + Orange 36-4: Orange + Blue 45-53: Blue+Amber 54-62: Amber+Dark Green 63-71: Dark green +Red 72-80: Red+Sky Blue 81-89: Sky Blue+Magenta 90-98: Magenta+Green 99-107: Green+Yellow 108-116: Yellow+Deongaree 117-127: Deongaree+Crimson 128-129: Crimson+White 130-134: Crimson 135-138: Deongaree 139+143: Yellow 144-147: Green 148+152: Magenta 153-157: Sky Blue 158-161: Red 162-166: Dark Green 167-171: Amber 172-176: Blue 177-180: Orange 181-185: Cooling 186-189: Fluorescent Blue 190-220: From fast to slow flow 221-250: From slow to fast flow 251-255: Random variation by voice
CH8	Color Wheel Fine	
CH9		
CH10	Gobo Wheel	0-87: Fixed Pattern 0-3: No Function 4-9:Pattern 1 10-15: Pattern 2

		<p> 16-21: Pattern 3 22-27: Pattern 4 28-33: Pattern 5 34-39: Pattern 6 40-45: Pattern 7 46-51: Pattern 8 52-57: Pattern 9 58-63: Pattern 10 64-69: Small Beam 1 70-75: Small Beam 2 76-87: Small Beam 3 88-199: Pattern shake from slow to fast 88-95: Pattern 1 96-103: Pattern 2 104-111: Pattern 3 112-119: Pattern 4 120-127: Pattern 5 128-135: Pattern 6 136-143: Pattern 7 144-151: Pattern 8 152-159: Pattern 9 160-167: Pattern 10 168-175: Small Beam 1 176-183: Small Beam 2 184-199: Small Beam 3 200-255: The fixed pattern flowing from slow to fast </p>
CH11	Gobo Wheel	<p> 0-89: Rotation Pattern 0-8: No Function 9-17: Pattern 1 18-26: Pattern 2 27-35: Pattern 3 36-44: Pattern 4 45-53: Pattern 5 54-62: Pattern 6 63-71: Pattern 7 72-80: Pattern 8 81-89: Pattern 9 90-255: Pattern shake from slow to fast 90-97: Pattern 1 98-106: Pattern 2 107-115: Pattern 3 116-124: Pattern 4 125-133: Pattern 5 </p>

		134-142: Pattern 6 143-151: Pattern 7 152-160: Pattern 8 161-169: Pattern 9 171-179: Pattern 9 not moving 180-217: From fast to slow flow 218-255: From slow to fast flow
CH12	Pattern Rotation	0-127: Pattern Change 128-177: Anti-Clockwise from slow to fast flowing 178-203: Stop 204-255: Clockwise from slow to fast flowing
CH13		
CH14	Prism	0-19: No function 20-75: Six linear prism 76-255: Eight side circular prism
CH15	Prism Rotation	0-127: Prism Change 128-191: Clockwise from fast to slow flowing 192-193: No function 194-255: Anti-Clockwise from slow to fast flowing
CH16	Frost	0-64: No function 65-255: 100% Linear Frost
CH17	Zoom	0-255: 0-100% Linear Zoom
CH18	Zoom Fine	0-255: Zoom Fine
CH19	Focus	
CH20	Zoom Fine	0-255: Zoom Fine
CH21		
CH22	Strobe	0-31: Strobe Off 32-63: Strobe On 64-95: Strobe from slow to fast 96-127: Strobe On 128-143: From fast to slow (slow close , quick open) 144-159: From slow to fast (quick open , slow close) 160-191: Strobe On 192-223: Random strobe from slow to fast 224-255: Strobe On
CH23	Dimmer	0-255: 0-100% linear dimming

16 Channel mode	Function	Function Control
CH1	Pan	0-255: Pan 0° -540°
CH2	Tilt	0-255: Tilt 0° -270°
CH3	Pan/Tilt Speed	
CH4	Macro Function	0-19: No function 20-24: Energy Saving Mode (230w) 25-129: No function 130-139 : Light on 140-149: Pan , Tilt reset 150-159: No function 160-169: All motor reset 170-199: No function 200-209: Reset 210-229: No function 230-239: Light off 240-255: No function
CH5	Color Wheel	0-8: White 9-17: White+Fluorescent Blue 18-26: Fluorescent Blue+Cooling 27-35: Cooling + Orange 36-4: Orange + Blue 45-53: Blue+Amber 54-62: Amber+Dark Green 63-71: Dark green +Red 72-80: Red+Sky Blue 81-89: Sky Blue+Magenta 90-98: Magenta+Green 99-107: Green+Yellow 108-116: Yellow+Deongaree 117-127: Deongaree+Crimson 128-129: Crimson+White 130-134: Crimson 135-138: Deongaree 139+143: Yellow 144-147: Green 148+152: Magenta 153-157: Sky Blue 158-161: Red 162-166: Dark Green 167-171: Amber 172-176: Blue

		177-180: Orange 181-185: Cooling 186-189: Fluorescent Blue 190-220: From fast to slow flow 221-250: From slow to fast flow 251-255: Random variation by voice
CH6		
CH7	Gobo Wheel	<p style="text-align: center;">0-87: Fixed Pattern</p> 0-3: No Function 4-9: Pattern 1 10-15: Pattern 2 16-21: Pattern 3 22-27: Pattern 4 28-33: Pattern 5 34-39: Pattern 6 40-45: Pattern 7 46-51: Pattern 8 52-57: Pattern 9 58-63: Pattern 10 64-69: Small Beam 1 70-75: Small Beam 2 76-87: Small Beam 3 <p style="text-align: center;">88-199: Pattern shake from slow to fast</p> 88-95: Pattern 1 96-103: Pattern 2 104-111: Pattern 3 112-119: Pattern 4 120-127: Pattern 5 128-135: Pattern 6 136-143: Pattern 7 144-151: Pattern 8 152-159: Pattern 9 160-167: Pattern 10 168-175: Small Beam 1 176-183: Small Beam 2 184-199: Small Beam 3 200-255: The fixed pattern flowing from slow to fast
CH8	Gobo Wheel	0-89: Rotation Pattern 0-8: No Function 9-17: Pattern 1 18-26: Pattern 2 27-35: Pattern 3 36-44: Pattern 4

		45-53: Pattern 5 54-62: Pattern 6 63-71: Pattern 7 72-80: Pattern 8 81-89: Pattern 9 90-255: Pattern shake from slow to fast 90-97: Pattern 1 98-106: Pattern 2 107-115: Pattern 3 116-124: Pattern 4 125-133: Pattern 5 134-142: Pattern 6 143-151: Pattern 7 152-160: Pattern 8 161-169: Pattern 9 171-179: Pattern 9 not moving 180-217: From fast to slow flow 218-255: From slow to fast flow
CH9	Pattern Rotation	0-127: Pattern Change 128-177: Anti-Clockwise from slow to fast flowing 178-203: Stop 204-255: Clockwise from slow to fast flowing
CH10	Prism	0-19: No function 20-75: Six linear prism 76-255: Eight side circular prism
CH11	Prism Rotation	0-127: Prism Change 128-191: Clockwise from fast to slow flowing 192-193: No function 194-255: Anti-Clockwise from slow to fast flowing
CH12	Frost	0-64: No function 65-255: 100% Linear Frost
CH13	Zoom	0-255: 0-100% Linear Zoom
CH14	Focus	
CH15	Strobe	0-31: Strobe Off 32-63: Strobe On 64-95: Strobe from slow to fast 96-127: Strobe On 128-143: From fast to slow (slow close , quick open) 144-159: From slow to fast (quick open , slow close)

		160-191: Strobe On 192-223: Random strobe from slow to fast 224-255: Strobe On
CH16	Dimmer	0-255:0-100% linear dimming

Set DMX address

Display the DMX 512 value of each channel. With this function you can display the DMX 512 value of each channel. The display automatically shows the channel with a value changing.

Synchronization & master /slave mode

Take some items and connect them by DMX cables, disconnect the items from DMX controller, the items will work synchronously, one as master, the others as slave.

Auto Program

With this function, you can run the internal program. You can select the desired program under. You can set the number of steps under. You can edit the individual scenes under. With this function, you can run the individual scenes either automatically, i.e. with the adjusted Step-Time.

Specifications

Physical	Length: 385 mm Width: 365 mm Height: 589 mm Weight: 17.5kg without accessories
Dynamic effects	Lamp: SIRIUS HRI 280W Color Wheel : 13+open Gobo Wheel : Gobo Wheel 1: 14+open Gobo Wheel 2: 9+open

	Beam color temperature: CTO, 9300K
	Beam color temperature: CTO, 9300K
	Electronic dimming: 0-100% linear dimming
	Strobe and pulse effects: 1-15 times/second, flicker free
	Speed color-wheel: rotation effect and random color
	Electronic "shutter" effect: instant open and blackout
	Tilt1 : 0-540°
	Tilt2 : 0-270°
Control and Programming	Control option modes: DMX, stand alone , DMX channels: 16/23CH Addressing and setting: control panel with LCD display Control: DMX 512
Optics	Light source: SIRIUS HRI 280W Minimum LAMP lifetime: 5000 hours Manufacturer's figure obtained under manufacturer's test conditions
Construction	Housing: High-impact, flammable- retardant, excellent Color: black IP rate: IP20
Installation	Mounting: Adjustment bracket, surface or truss mount Orientation: Any Location: Outdoor/indoor use
Connections	DMX data in / through: 3-pin XLR and 5-pin XLR
Electrical	AC power in/through: 110-240v nominal, 50/60 Hz Rated power: 280w
Thermal	Cooling System: Forced air (temperature-regulated, low noise) Temperature: Max ambient 8 degree
Included items	Power cable 1.5m (4.9) Mounting bracket

Remark: All information is subject to change without prior notice.